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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,022	10/08/2004	Wolfgang Gruner	2002P06124WOUS	8720

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

LEE, CHRISTOPHER E

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/511,022	Applicant(s) GRUNER ET AL.	
	Examiner Christopher E. Lee	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt Acknowledgement

1. Receipt is acknowledged of the Preliminary Amendment filed on 8th of October 2004. No claim has been amended; claims 1-3 have been canceled; and claims 4-8 have been newly added. Currently, claims 4-8 are pending in this Application.

Drawings

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (See Specification, page 2, paragraphs [0005]-[0006]. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. The claims 6 and 7 recite the subject matter "the differential transmission principle" in line 2, respectively. However, it has not been specifically clarified in the claims 6 and 7, and their intervening claims, respectively. Therefore, the Examiner presumes that the term "the differential transmission principle" could be considered as --a differential transmission principle-- in light of the specification since it is not defined in the claims.

4. The claim 8 recite their limitations without a transitional phrase, such as "comprising," "further comprising," or "consisting of", etc. (*See M.P.E.P. 2111.03 Transitional Phrase*). Thus, the claim 8 doesn't define its scope of the claimed invention. The Examiner presumes the transitional phrase for the claim 8 would be the open transitional phrase "comprising" in light of the specification for the purpose of reject the claim 8 by prior art.

5. Applicant is advised that should claim 4 be found allowable, claim 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 4-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Becker [US 6,233,509 B1].

Referring to claim 4, Becker discloses a system (i.e., electronic diagnostic system; See Abstract and col. 1, lines 6-7) for connecting a mobile data unit (i.e., test equipment Analyzer 3 of Fig. 1) to a field bus (i.e., CAN bus; See col. 2, lines 54-59), comprising:

- a coupling unit (i.e., Active connector 1 of Fig. 1) connected to the field bus (i.e., said CAN bus) via a spur line (i.e., Conductors 5-8 in Fig. 1) and a line driver (i.e., physical layer Circuit 9 of Fig. 1; See col. 2, line 53 through col. 3, line 1), wherein

- signals (i.e., unidirectional digital signals) at the output of the line driver (i.e., at the output of said physical layer Circuit; See col. 2, lines 65-67) are injected via a first level converter (i.e., a first differential line driver/receiver circuit 11 of Fig. 1) into a data link (i.e., Cable 2 of Fig. 1) or are received from the data link (See col. 3, lines 1-3 and Fig. 1); and
- a mobile data unit (i.e., test equipment Analyzer 3 of Fig. 1) receiving the signals (i.e., said unidirectional digital signals) via a second level converter (i.e., a second differential line driver/receiver circuit 12 of Fig. 1; See col. 3, lines 4-9) from the data link (i.e., said Cable) or injecting the signals into the data link (See col. 4, lines 14-22 and Fig. 1).

Referring to claim 5, Becker teaches

- the mobile data unit (i.e., test equipment Analyzer 3 of Fig. 1) is a mobile operator control and/or monitoring device (See col. 2, lines 11-19; actually, said test equipment Analyzer performs vehicle diagnostics, i.e., testing control and/or monitoring said testing result).

Referring to claim 6, Becker teaches

- a transmission of a signal (i.e., unidirectional digital signals) via¹ the data link (i.e., Cable 2 of Fig. 1) between a pair of level converters (i.e., differential line driver/receiver circuits 11 and 12 in Fig. 1) is based on a differential transmission principle (See col. 3, lines 1-5).

Referring to claim 7, Becker teaches

- a transmission of a signal (i.e., unidirectional digital signals) using² the data link (i.e., Cable 2 of Fig. 1) between a pair of level converters (i.e., differential line driver/receiver circuits 11 and 12 in Fig. 1) is based on a differential transmission principle (See col. 3, lines 1-5).

¹ "via"_{prep} is defined as "by way of" and "by means of", and

Referring to claim 8, Becker discloses a system (i.e., electronic diagnostic system; See Abstract and col. 1, lines 6-7) for connecting a mobile data unit (i.e., test equipment Analyzer 3 of Fig. 1) to a field bus (i.e., CAN bus; See col. 2, lines 54-59), comprising:

- a coupling unit (i.e., Active connector 1 of Fig. 1) is connected to the field bus (i.e., said CAN bus) via a spur line (i.e., Conductors 5-8 in Fig. 1) and a line driver (i.e., physical layer Circuit 9 of Fig. 1; See col. 2, line 53 through col. 3, line 1), and
- the signals (i.e., unidirectional digital signals) at the output of the line driver (i.e., at the output of said physical layer Circuit; See col. 2, lines 65-67) are fed using a first level converter (i.e., a first differential line driver/receiver circuit 11 of Fig. 1) into a data link (i.e., Cable 2 of Fig. 1) or are received from therefrom (See col. 3, lines 1-3 and Fig. 1), and wherein
 - the mobile data unit (i.e., said test equipment Analyzer) receives the signals (i.e., said unidirectional digital signals) using a second level converter (i.e., a second differential line driver/receiver circuit 12 of Fig. 1; See col. 3, lines 4-9) from the data link (i.e., said Cable) or feeds them thereinto (See col. 4, lines 14-22 and Fig. 1).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kramer et al. [US 6,466,539 B1] disclose bus system.

Westerfeld et al. [US 6,614,634 B1] disclose field bus arrangement with a field bus distributor.

Hansemann et al. [US 5,805,052 A] disclose cable system for signal transmission.

Cho et al. [US 6,694,439 B2] disclose apparatus for providing communications data over a power bus having a total current that is the absolute value of the most negative current excursion during communication.

² “using”_{vi} is defined as “action by means of”. (Merriam-Webster’s Collegiate® Dictionary (10th ed.))

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 571-272-3637. The examiner can normally be reached on 9:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher E. Lee
Examiner
Art Unit 2112

CEL/

A handwritten signature in black ink that reads "Christopher E. Lee". The signature is written in a cursive, flowing style.